



# THE SCIENTIST AND ENGINEER

April 2000

Vol. 25 No. 2

## PRESIDENT'S MESSAGE

By Neil Baron

It is with great anticipation that we look forward to our upcoming ASE Annual Symposium on May 10, 2000, but more about that in a moment. It is hard to believe that the activity of our association could increase from the dizzying pace of the past quarter. I hope you

have had the opportunity to join us in some of our recent activities.

In February, Mr. Jeff Hough chaired ASE's orchestration of NAVSEA's celebration of National Engineers Week. This week of activities was a huge success, and those aren't just my words, they are the words of your leadership at NAVSEA that contacted

me personally to thank ASE for making this celebration of our profession such a success. This year we not only targeted our leadership to provide their views on engineering and the technical challenges we have yet to

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Neil Baron, President of ASE

## 37<sup>th</sup> Annual Technical Symposium

By Billy Douglas

The Association of Scientists and Engineers will hold its 37th Annual Technical Symposium and Banquet on Wednesday May 10th at the Sheraton Crystal City Hotel, 1800 Jefferson Davis Highway, Arlington Virginia.

This year's theme is "The NAVSEA Corporation – An Agile Enterprise for Adaptable Ships/Weapon Systems" Sixteen technical papers will be presented in four different technical sessions.

At the Banquet, Vice Admiral George P. Nanos Jr., Commander, Naval Sea Systems Command, will present his

### Upcoming Events

<b>ASE Symposium</b>	<b>3 May</b>
<b>Registration</b>	
<b>Deadline</b>	
<b>ASE Technical</b>	<b>10 May</b>
<b>Symposium</b>	
<b>ASNE Day</b>	<b>17-19 May</b>

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"Views from the Bridge. Mr. Paul Anthony, local media celebrity, will serve as the Master of Ceremonies. During the Banquet, deserving members of the NAVSEA community will be recognized for their expertise and significant professional contributions.

Registration fee for the Technical Symposium is \$65 and the cost for the Banquet is \$30. Please see your ASE keymember or your Administrative Officer for registration details, or call the Registration Chairman, Mr. Richard Bergner, (703) 418-2630

# Symposium Registration Process

By Rick Bergner

## NAVSEA HEADQUARTERS EMPLOYEES (Civilian and Military)

o Each employee wishing to attend the ASE Technical Symposium is responsible for submitting a request for approval to do so. Approval to attend during working hours is obtained at the supervisory level. Approval to attend at NAVSEA expense is obtained at the Directorate (or Group) level.

o Approvals are solicited via a single electronic response to the "Call for Attendance", which will be a memo distributed by your ASE Keymember. Your Keymember will

## **SYMPOSIUM PROGRAM**

**REGISTRATION  
AND CHECK IN**  
7:00 - 8:30 AM

**TECHNICAL  
SESSIONS**  
8:30-11:15 AM

**SOCIAL HOUR**  
11:15 AM - 12:30 PM  
(CASH BAR)

**BANQUET  
LUNCHEON**  
12:30 - 1:30 PM  
**PROGRAM**  
1:30 - 2:45 PM

work with your AA/AO in expediting your request. You are asked to make every effort to respond by 20 April. **Non-approved attendees will be responsible for accountability during working hours.**

o The following information will be requested:

Last Name  
First Name  
Title, if any (i.e., Dr., Rev., Hon.,  
Adm., etc.)  
Directorate and Code  
Current ASE membership status

o If you plan to attend the banquet, you must make payment of \$30.00 to cover the cost for the banquet, preferably during the symposium registration window and by check, made out to "The Association of Scientists and Engineers" or "ASE". This payment will be refunded if reservation must be canceled up to three days prior to the banquet. Banquet attendee grouping preferences should be made at time of payment. **Only technical session attendees and guests may attend the banquet.**

If in doubt about any of the above, obtain registration information for the technical sessions and the banquet from your ASE Keymember.

## NON-NAVSEA HEADQUARTERS EMPLOYEES

o Obtain registration form via the publicity mailing or from the registration committee, or any ASE

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## **LUNCHEON PROGRAM**

### **PRESENTATION OF COLORS**

*U.S. Navy Honor Guard*

### **WELCOMING REMARKS**

*Neil Baron  
President, A.S.E.*

### **INVOCATION**

*CAPT Jane F Vieira, CHC, USN  
Chaplain, Naval Sea Systems  
Command*

### **LUNCHEON**

### **PRESENTATION OF AWARDS**

*Outstanding Service Award  
John C. Niedermair Award  
Silver Medal Award  
Dr. James Lisnyk Award  
Professional Achievement Award  
Team Award  
Past President Award  
Engineer of the Year  
Scientist of the Year*

### **VIEW FROM THE BRIDGE**

*VADM George P. Nanos, USN  
Commander, Naval Sea Systems  
Command*

### **KEYNOTE SPEAKERS**

Mr. Jeff Koses, Deputy Director for  
Services Acquisition Center, GSA  
and  
Mr. Len Pinkey, Director  
for Service Contracts Division, GSA

### **CLOSING REMARKS**

### **MASTER OF CEREMONIES**

*Paul Anthony  
TV Personality*

**At the Symposium Registration Desk (10 May 2000), non-approved personnel (personnel without a signed DD1556 Form identifying their name) will be asked to pay \$65 by personal check or cash (Government Credit Cards will not be accepted) to attend the technical session. Upon request, and if space is available, attendees/guests may be allowed to attend the banquet for an additional \$30 fee.**

## ***Symposium Registration Process***

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Keymember.

Publicity Committee:

Chairman – Steve Viscidi, (703) 602-2091, Ext. 291

Registration Committee:

Chairman – Rick Bergner, (703) 418-2630

Deputy – Mike Glenn, (703) 602-2547, Ext. 403

Keymember Committee:

Chairman – Frank Pesce, (703) 602-8818, Ext. 132

o Complete registration form and provide payment (no-cash) for listed attendees at the technical sessions and banquet to:

Association of Scientists and Engineers

Naval Sea Systems Command  
c/o ASE Registration Committee Chairman  
P.O. Box 15864  
Arlington, VA 22215

o Cost for ASE Technical Symposium: \$65 per person

o Cost for Technical Symposium and Banquet: \$95 per person

o A minimum of ten (10) banquet attendees is required to reserve a table, however, group seating requests for smaller groups will be accommodated, where possible.

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## **National Engineer's Week**

### **Photos by Greg Brown**



VADM George P. Nanos Presenting "The View From the Bridge" at National Engineer's Week



Mr. Gregg Hagedorn, SEA 05B; Mr. Neal Baron, SEA 53C President ASE; RADM George Yount, SEA 05 and Mr. Jeff Hough, SEA 05R2 National Engineer's Week Organizer

**President's Message**  
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overcome with presentations from VADM Nanos, RADM Yount, and the ASN RDA (CHENG), Mr. Mike O'Driscoll. We also targeted the technical engineering challenges of new ship and submarine design along with some emerging technological programs on affordability and the values of integrated power systems. Finally, we also linked forces with Anthony Nickens (Engineering Intern Coordinator) and brought the excitement of engineering at NAVSEA to our recent hires. This final element included trips to our two local premier surface warfare laboratories at Carderock, MD and at Dahlgren, VA. WOW! What a week. Thanks, Jeff, and all those ASE members who worked so hard to pull NAVSEA's National Engineer's Week Celebration together. They unselfishly volunteered their time for us, and for that we are grateful.

Mr. Mike Safina, ASE's noontime speaker chairman, has kept pace as well. Of special note this quarter was a noon time session given by Mr. Howard Fireman, science advisor for 7<sup>th</sup> Fleet. Mr. Fireman gave a classified presentation on technology needs for our Forward Deployed Naval Forces. To hold a classified noontime session was a first for ASE, and based on the tremendous attendance, this may be a forum we look at more closely in the

future.

These past months have also elicited support from ASE members to judge our local High School Science Fairs. Mr. Gordon McCoy has led a team of ASE judges to all the surrounding counties of Maryland, Virginia and the District of Columbia. I can't wait to see the winners displaying their ideas at our annual symposium. My fellow engineers, you had better look out, these young professionals are good! And with the right mentorship, we may find them in our spaces at the Navy Yard a lot sooner than you might expect.

**See Symposium  
Section Starting on  
Page 2 for more  
details regarding the  
upcoming Symposium  
on 10 May.**

Finally, the executive board has been dealing with the basic business of the association. Of specific note is the effort that Ms. Dolly Hoffman has done in working up constitutional changes that are necessary to bring our association into the information age and better posture our future administrations to deal with the changes that will come with our move to the Washington Navy Yard. You will be seeing the fruits of Ms. Hoffman's labor in a series of requests for constitutional change that you will be asked to vote on as part of our election process this coming summer.

Now for our upcoming annual symposium. To describe the last month as a bee hive of activity would be an understatement. The papers are

written and going through final chop. Mr. Billy Douglas, our symposium chairman, has had his plate full with planning, changes, redirections, and updates as we inch our way closer and closer to May 10, Symposium Day. We have even proactively involved the executive committee to keep things as on track as possible. For those of you who have not yet had the excitement of chairing the symposium committee, you don't know what you're missing. I am sure Mr. Douglas will be glad to tell you all about it once he comes up for air on May 11! The symposium committees will still be looking for volunteers to help out in their particular areas leading up to or even during symposium day. Don't forget, if you get that call from one of our members in need, find a way to help, an hour or two here and there are all that is ever needed. But if you can not help directly, then please pass an urgent request for assistance on to someone you may know who might be interested in helping out. Remember that one of the most valuable traits of our association is that unseen, but ever present, network of professionals here at the Naval Sea Systems Command. Let's find ways to help each other out.

In closing, I hope to see you all soon at our upcoming symposium. Come join me, no . . . come join us in celebrating our profession. I can only guarantee you this, that you will be intellectually stimulated, professionally inspired, and personally proud of your profession and of our association. May 10, 2000, ASE Annual Symposium, I'll see you there!

## Symposium Papers

By Bill Schoenster

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### RISK-BASED INSPECTION PLANNING FOR SHIP HULL STRUCTURES

Gilberto F. M. de Souza, Ph.D.

Bilal M. Ayyub, Ph.D. and P.E.

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### RELIABILITY-BASED LOAD AND RESISTANCE FACTOR DESIGN (LRFD) OF HULL STRUCTURAL COMPONENTS OF SURFACE SHIPS

Ibrahim A. Assakkaf, PhD

Bilal M. Ayyub, PhD, PE

Norma Jean Mattei, Ph.D.

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### PREDICTING THE NUMBER OF DEFECTS REMAINING IN OPERATIONAL SOFTWARE

Patrick J. Hartman, Ph.D., P.E.

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### EVOLUTIONARY ACQUISITION AND OPERATIONAL TESTING, TIME FOR A NEW APPROACH

George Axiotis

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### SYNTHETIC DECKING DEVELOPMENT FOR U.S. NAVY AMPHIBIOUS SHIPS

Robert A. Jones

Richard P. Kole

Karl L. Aschenbach

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### INCENTIVIZED ENERGY CONSERVATION (ENCON)

Mr. Hasan Pehlivan

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### EXPERIMENTAL DETERMINATION OF BEARING ALIGNMENT FOR STATICALLY INDETERMINATE CRANE HOIST TRANSMISSION SHAFTING

Charles E. Cotton

Shawn E. Smither

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### ADVANCES IN AIRCRAFT CARRIER LIFE CYCLE COST ANALYSIS FOR ACQUISITION AND OWNERSHIP DECISION- MAKING

Irvin M. Chewning

Stephen J. Moretto

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### AMERICAN BUREAU of SHIPPING & NAVAL SEA SYSTEMS COMMAND COOPERATION FOR CHANGE

John Kallinikos

Scott CR Henry

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### THE CHALLENGES OF SHIP DISPOSAL IN THE 21<sup>ST</sup> CENTURY

CAPT Garry Hall

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### TAKING CARE OF OUR OWN - NAVSEA'S SUCCESSFUL OUTPLACEMENT OF THE ENVIRONMENTAL DETACHMENTS

Robert L. Milner

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Charles H.T. Springer

William C. Randolph

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### BATTLE FORCE INTEROPERABILITY IT'S A LONG WAY FROM THE MOUNTAIN TOP TO THE FLEET

CAPT Dan Smith

Paul Mann

Laurel Curley

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**OPEN SYSTEMS  
ARCHITECTURE  
C4I Template**

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**INITIAL TESTING  
RESULTS OF THE  
INTEGRATED POWER  
SYSTEM AT THE FULL  
SCALE LAND BASED  
ENGINEERING SITE**

**Mr. John Madaio  
Mr. Brian J. Hillers**

**Mr. John Vasilakos**

**Thomas Dalton**

**CDR(sel) Timothy J. McCoy**

**Matthew Stauffer**

**Edward Harvey**

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**PREPARING FOR NEW  
SENSOR TECHNOLOGIES  
& DATA FUSION –  
A CALL FOR AN AGILE  
ENTERPRISE WORK  
FORCE**

**Russell E. Bryant, Jr.**

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**INTEGRATED  
SHIPBOARD  
PERFORMANCE  
MONITORING, TRAINING  
AND ASSESSMENT  
(PMTA) STRATEGY**

**Mr. Michael A. O'Neal  
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**Mr. William O. Davis**

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# From the Editor's Desk

By Carl Biefeld

This is the second electronic mailing of ***The Scientist and Engineer***. If you've discovered any problems with reading, or using this document, please let me know so I can fix it in upcoming issues. If you know of any ASE members who did NOT receive this mailing, please send it to them and (more importantly) let me know, or have them email me their address. If you have received this by US mail and would like to receive it electronically, please send your email address to: [BiefeldCE@navsea.navy.mil](mailto:BiefeldCE@navsea.navy.mil) and I will see that you are added to the mailing list and that your membership information is updated.

## **ASE**

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